

HAMSO21.001APC

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : BAKKE, Stig ) Group Art Unit Unknown  
 )  
 Appl. No. : Unknown )  
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 Filed : Herewith )  
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 For : TOOL FOR CHANGING THE )  
 DRILLING DIRECTION )  
 WHILE DRILLING )  
 )  
 Examiner : Unknown )

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 AMENDMENT  
 AND SUB  
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 2002

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents  
 Washington, D.C. 20231

Dear Sir:

Prior to examination, please amend the above referenced application as follows:

IN THE ABSTRACT:

Please delete the abstract and insert the following amended abstract:

Abstract of the Disclosure

A tool adapted for changing the direction of drilling during drilling. The drilling equipment used in the drilling includes a drill string, a bent sub, a drill motor, and a drill bit. The tool is positioned between the drill string and the bent sub, includes housing elements connected to one another, and has a passage for drilling fluid. The tool can be activated for rotation of the bent sub so that the direction of drilling is changed in an infinitely variable manner. The tool includes a valve adapted for choking the passage so that the tool can be activated for rotation, a piston adapted for providing the rotation after passage has been choked, and sets of cooperating guides adapted for forced guiding of the rotation. The guides can be formed by twisted splines formed in the wall of the passage and in the wall of the opposite piston.